Educational Jazz

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Released in 1959, Miles Davis's *Kind of Blue* is his best-selling album and the best-selling jazz album of all time. It is also regarded as jazz's greatest album and one of the greatest records ever made. The album was recorded in only two sessions on two spring days; the performers—Cannonball Adderley, Paul Chambers, John Coltrane, Jimmy Cobb, and Bill Evans—arrived at the studio with no score and very little idea of what they were to perform. Once assembled, the group received only brief instructions from Davis and then began recording. Simply put, one of the greatest albums ever recorded was largely improvised.

Were it possible to imagine such an approach to education, it would strike many as bizarre. Thanks in part to organizations such as the Liaison Committee on Medical Education, the ACGME, and the ACCME, medical education has been moving in the opposite direction, away from spontaneity and improvisation and toward highly planned programming. Educators have learned that to pass inspection, they must devise and adhere to a meticulous program that outlines in advance all aspects of learning: curriculum, instructional approaches, and assessment techniques.

For example, for a medical education program—whether undergraduate, graduate, or postgraduate—to earn and maintain its accreditation, it must develop clear learning objectives. Before a learner embarks on a course of study, enrolls in a course, or even begins participating in a single instructional interaction, clear learning objectives are expected to be enunciated. In other words, both educators and learners are supposed to know in detail what they are trying to achieve before they set to work, and they should see

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quality in terms of adherence to objectives. From this perspective, educational spontaneity and improvisation seem to represent failures.

The shortcomings of a plan-and-execute approach to education are so plain that they can prove difficult to recognize. Foremost among them is the fact that to the extent that an educator is expected to know exactly what will happen before even encountering learners, it implies that educators need not attend to learners at all. When everything is planned in advance, educators can disregard learners, exhibiting no awareness of their reactions to what they are being taught and making no effort to respond to what they have to say. In fact, the educator need not even be present, either literally or figuratively, with the students, and the entire curriculum could be phoned in.

Ultimately, the plan-and-execute model is grounded in a flawed conception of education, which regards teaching and learning as little more than a transfer of information from full receptacles to empty ones. It assumes that every question that might need to be posed and every answer that might be offered in response can and should be anticipated before the educational encounter. From the standpoint of both educators and learners, such an approach leaves nothing exploratory, adventurous, or even novel in education. Everything that needs to be known is assumed to be known already—the mission, to impart it as efficiently as possible.

This way of conceiving education is not so much wrong as shallow and impoverished. It takes a very dim view of the capabilities of learners. It suggests that they are little more than storage media onto which knowledge and skills—or data and programs—need to be written. Learner performance is appraised entirely as the ability to parrot what the educator has said or imitate what the educator has done. It suggests that the learner has little or no role to play as an inquirer and that the posing of questions should be limited to clarifying what the instructor is attempting to get across. On this account, education may be likened to mass production, perhaps even cloning.

The educator suffers, too. The presumption is that, at least in the classroom, educators have nothing left to learn. The goal is to deliver the same product in the same way each and every time. Each successive instructional interaction becomes less and less engaging, taking on more and more the character of an assembly-line worker performing a series of rote manual operations. When education is conceived in such terms, instructors might just as well record their presentations and then simply hit the play button. Ultimately, educators are ripe for replacement by robots, which can recite the same lecture or rehearse the same steps of a procedure over and over again without becoming bored.

In a plan-and-execute model of education, important opportunities are lost. What if the educational interaction is not going well? In reality, it is impossible to know in advance exactly what will happen in every case. Something may go wrong, and even when things go exactly as planned, unless and until learners too are replaced by robots, different learners and groups of learners often react differently to the same material. Adhering to the plan no matter what deprives the educator of the opportunity to attend to and adapt to what is happening, forgoing opportunities to fix problems and seize opportunities and thus improve the quality of educational interactions.

And even when an educational interaction is going well, adhering to a preordained plan deprives the educator of meaningful opportunities to learn. Without change, educational performance can never improve. Educators need opportunities to try out different approaches, to experiment, and to put what they are learning to use in real time. When such deviations from script are not only allowed but encouraged, education takes on a creative dimension for both educators and learners, who become not only question answerers but question posers in their own right. Education is transformed into an opportunity for shared inquiry, opening up doors to discovery.

What if there is no such thing as a perfect lesson plan? What if perfection is attainable only in specific circumstances, with a particular group of people working on a particular topic in a particular place and at a particular time? What if approaching perfection means respecting this particularity, in part because no two educational interactions are ever exactly the same, and even more so because doing otherwise implies

that the educator can perform well with eyes, ears, mind, and heart half closed, never really seeing what is unfolding from the learner's point of view? What if educational excellence turns out to require a high degree of educational presence?

Experienced educators know that it is possible to be present in terms of attendance without being really present in the sense of focused and aware. How learners are reacting should shape how the educator moves forward from course to course, session to session, and even moment to moment. Like a good dancer, really good educators are constantly sensing and reacting to their learners, moving away from approaches that do not seem to be working and toward those that are working well. The goal is far more than merely transmitting information: it is to engage the learner in a shared pursuit of understanding, enabling learner and educator to share the joy of discovery.

There is an old military saying: "Even the best battle plan does not survive contact with the enemy," which can also be rendered as "Every battle plan becomes obsolete the moment the first shot is fired." A good internist does not ask exactly the same questions, perform exactly the same physical examination, and say exactly the same things to every patient. A good surgeon does not perform every operation exactly the same way. In both cases, doing so would often jeopardize the health and perhaps even the life of the patient. Instead a good doctor is always adapting to the situation at hand, improvising according to what is happening in the moment.

If the practice of medicine requires such capacities, then medical education should be approached in a way that not only tolerates but also encourages improvisation. Of course, educators and learners should have objectives, but the plans should never be allowed to stand in the way of good education. Learning opportunities present themselves in unexpected ways, and educators need to be prepared to seize them when they do. To proceed otherwise is to assume that we know everything there is to know, that we can predict exactly what will happen, and that education has no place for a sense of adventure and the joy of discovery.

On *Kind of Blue*, Miles Davis and his bandmates created something new and unexpected, whose excellence derives from freedom, the fact that no one was gripping the performance in a chokehold. Today's educators and especially the educational accrediting agencies who are shaping their hopes and expectations need to be reminded that excellence in education often lies less in holding tightly to a preordained plan than in letting go and allowing educational interactions to find their own paths. The world of teaching and learning is far bigger than any of us can imagine, and by opening ourselves up to its revelations, we can participate in a higher level of educational excellence.